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Sensor/actuator flush-type socket, 12-pos., M12 SPEEDCON, rear/screw mounting with Pg9 thread, with 0.5 m halogen-free TPE litz wire, $12 \times 0.14 \text{ mm}^2$

Why buy this product

- Pre-assembled with litz wires for immediate use
- ☑ Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- Mall standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- For high transmission safety: shield connection to the housing with optional EMC nut
- SPEEDCON fast locking system reduces cabling times



Key Commercial Data

| Packing unit | 1 STK |
|--------------|-----------------|
| GTIN | 4 046356 325806 |
| GTIN | 4046356325806 |

Technical data

Dimensions

| Length of cable | 0.5 m |
|-----------------|-------|
|-----------------|-------|

Ambient conditions

| Ambient temperature (operation) | -25 °C 85 °C (Plug / socket) |
|---------------------------------|------------------------------|
| Degree of protection | IP67 |

General

| Note | The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration. |
|-----------------------|--|
| Rated current at 40°C | 1.5 A |



Technical data

General

| Rated voltage | 30 V | |
|--|---------------------------------|--|
| Rated surge voltage | 0.8 kV | |
| Number of positions | 12 | |
| Insulation resistance | \geq 100 MΩ | |
| Coding | A - standard | |
| Standards/regulations | M12 connector IEC 61076-2-101 | |
| Status display | No | |
| Overvoltage category | II | |
| Degree of pollution | 3 | |
| Connection method | Individual wires | |
| Insertion/withdrawal cycles | > 100 | |
| Torque | 3 Nm 4 Nm (Installation-side) | |
| Mounting type | Rear mounting Pg9 With flat nut | |
| Material | | |
| Flammability rating according to UL 94 | V0 | |
| Contact material | CuZn | |
| Contact surface material | Au | |
| | | |

| Contact surface material | Au |
|--------------------------|------------------------------|
| Contact carrier material | PA 6.6 |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | FKM |

Cable

| Cable type | TPE litz wire |
|------------------------------------|--|
| Conductor cross section | 0.14 mm ² |
| AWG signal line | 26 |
| Conductor structure signal line | 7x 0.16 mm |
| Core diameter including insulation | 1.1 mm ±0.05 mm |
| Thickness, insulation | 0.21 mm |
| Wire colors | Brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue |
| Material conductor insulation | TPE |
| Conductor material | Tin-plated Cu litz wires |
| Standards/specifications | M12 connector IEC 61076-2-101 |
| Insulation resistance | $\geq 20 \text{ M}\Omega^*\text{km}$ |
| Conductor resistance | \leq 57.6 m Ω /m |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 V AC |
| Ambient temperature (operation) | -40 °C 85 °C (cable, fixed installation) |
| | -25 °C 85 °C (cable, flexible installation) |

Standards and Regulations

| Standard designation | M12 connector |
|----------------------|---------------|



Technical data

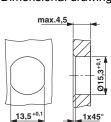
Standards and Regulations

| Standards/regulations | IEC 61076-2-101 |
|--|-----------------|
| Flammability rating according to UL 94 | V0 |
| | |

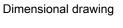
Environmental Product Compliance

| China RoHS | Environmentally Friendly Use Period = 50 |
|------------|--|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings



Dimensional drawing





Housing cutout for Pg9 fastening thread, mounting panel with thread

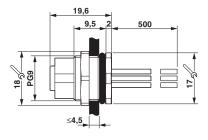
Housing cutout for Pg9 fastening thread, mounting panel with feedthrough hole (alternatively with surface as protection against rotation)

Schematic diagram



Pin assignment M12, 12-pos., female side view

Dimensional drawing



M12 flush-type connector

Circuit diagram

| 1 ÞBN | |
|----------|-----|
| | |
| 2 D BU | |
| | |
| 3 P | |
| 4) GN | |
| F 1 | |
| 5 D PK | |
| 6 - YE | |
| | |
| 7) BK | |
| | |
| 8 D GY | |
| 9 5 RD | |
| | |
| 10 D VT | |
| | |
| 11 D GYP | ٢. |
| 12 D | i . |
| | , |

Contact assignment of the M12 socket



Approvals

Approvals

Approvals

cULus Recognized / EAC

Ex Approvals

Approval details

cULus Recognized

 $http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm \ E221474-20140616$

| mm²/AWG/kcmil | 26 |
|--------------------|-------|
| Nominal current IN | 1.5 A |
| Nominal voltage UN | 30 V |

| EAC EAC | B.00767 |
|---------|---------|
|---------|---------|

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